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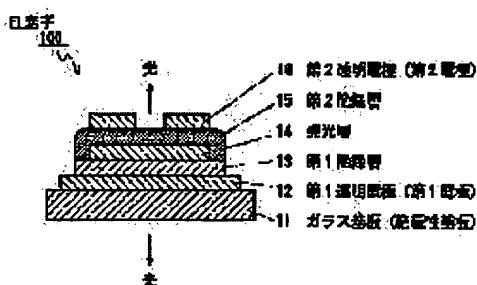
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(54) ELECTROLUMINESCENT ELEMENT AND MANUFACTURE THEREOF

(57) Abstract:

PURPOSE: To increase the electron concentration in the light emitting layer, and to improve the light emitting luminance by adding the predetermined quantity of the group II element having ion radius different from ion radius of the group II element forming the base material in the light emitting layer, to which a luminescent center element is added.

CONSTITUTION: Substrate temperature of a glass substrate 11 is held at the room temperature, and the mixture gas, which is obtained by mixing hydrogen sulfide at 20% with argon, is led into a sputtering device, and a film is formed by the high frequency power. At this stage, cerium fluoride and magnesium sulfide are added to digallium calcium tetrasulfide powder, and heated in the hydrogen sulfide atmosphere, and this heated powder is used as a target. The group II element having ion radius different from the ion radius of the light emission center element and the group II element forming the base material is substituted for digallium calcium tetrasulfide as the base material. Electron is emitted from an isoelectronic trap to a conductor



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so as to increase the electron concentration in a power generating layer 14 by setting the addition quantity of other element except for the light emission center element and the group II element having a different ion radius at 0.1-40.

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